

PATENT

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### **ABSTRACT OF THE DISCLOSURE**

A metal material adhesion method is described. The method is used for an optical transceiver module assembly process to adhere a protection cover of a laser diode in a metal shell and enhance the adhesion strength thereof. The method employs the following steps. First, the protection cover and the metal shell are provided. A primer layer is coated inside the metal shell. The laser diode is aligned with the metal shell to provide a maximum signal strength position. An epoxy layer is glued between the metal shell and the protection cover to fix the laser diode in the best position. The method further provides a sealant layer to protect the epoxy layer from moisture and a second premier layer to enhance the adhesion strength between the protection cover and the epoxy layer.